## LSBPVSF | LSBPESF- DRUVA®PUR LINE REGULATOR

LINE REGULATOR | PURE LINE (STAINLESS STEEL) | 5 m $^3$  SERIES | PRECISION REGULATOR SINGLE STAGE | 4-PORT VERSION



This single-stage line pressure regulator is used in gas supply systems for pure, inert, flammable, oxidising, corrosive and  $\prime$  or toxic gases and their mixtures up to gas purity 6.0.

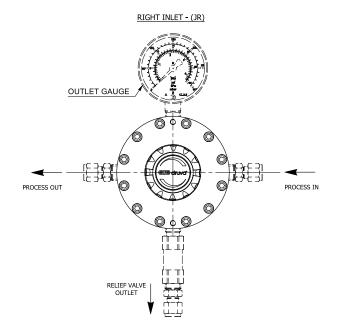


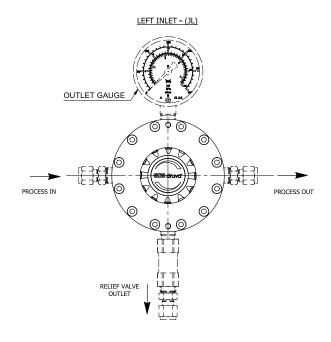
#### **SPECIAL FEATURES:**

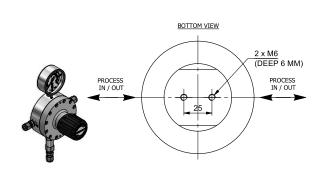
- > Low outlet pressure
- > Very fine adjustment
- > The large housing diameter of this pressure reducer allows large metal diaphragms and thus very fine adjustment of the back pressure at comparatively high flows down to 250 mbar
- > The line pressure regulator reduces the line pressure with very small hysteresis to very low supply pressures

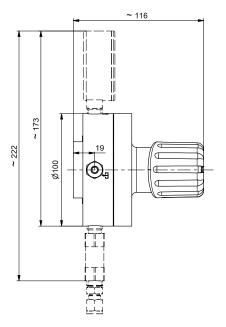
TECHNICAL DATA					
Working temperature:	-20 °C to +60 °C				
Inlet / outlet ports:	NPT 1/4"f, optional compression fitting				
Leakage rate seat:	<5x10 <sup>-6</sup> mbar l/s (Helium)				
Leakage rate outside:	<1x10 <sup>-9</sup> mbar l/s (Helium)				
Filter:	1x for inlet 1x for each outlet				
Weight:	2,57 kg				
Flow nominal:	5 m³/h (N₂)				
Material gas wetted parts:					
Regulator body:	Stainless Steel				
Regulator diaphragm:	Hastelloy				
Regulator seat:  LSBPVSF-Version  LSBPESF-Version	FKM EPDM				
Relief valve seat: LSBPVSF-Version LSBPESF-Version	FKM EPDM				
Regulator poppet:	Stainless Steel				
Regulator seal:	PCTFE				
Regulator poppet:	Stainless Steel				
Pressure rates line regulator:					
Inlet pressure	12   40 bar				
Outlet pressure 12 bar Version: 40 bar Version: Pressure gauges rates (pressure	250 mbar   450 mbar   1300 mbar 250 mbar   450 mbar   1300 mbar   3000 mbar 0-300 mbar (250 mbar)   0-600 mbar (450 mbar)   0-1600 mbar (1300 mbar)				
rates):	0-4000 mbar (3000 mbar)				
Contact gauges available – please conta	act us				
Cracking pressure relief valves:	2 bar (1300 mbar)   4,6 bar (3000 mbar)				
	Pressure test with Helium of each item				
Test in production:	Seat leakage test with Helium of each item				
rest in production.	Helium leak test of each regulator against atmosphere				
	Test of functionality of each item				
	Type test in accordance with ISO 7291				
	Additional life cycle test				
Approvals during development:	Electrostatic chargeability test     Fulfill requirements according ISO 80079-36; IEC TS 60079-32-1 and German TRGS 727     Usable in EX-areas zones 1 and 2 for gases with explosion risk group I; IIA; IIB; IIC				

### **TECHNICAL DRAWING:**









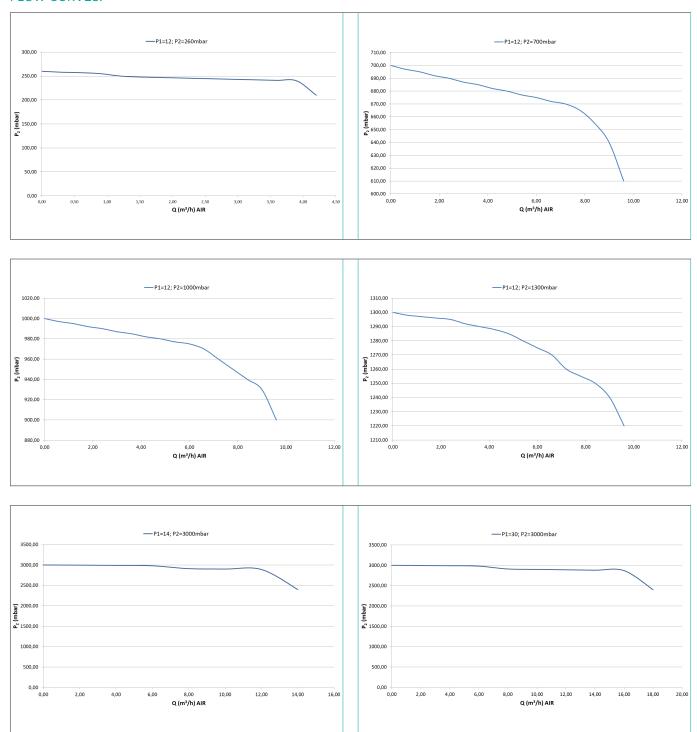
#### Connections

N14F - NPT1/4" female M03S - Compression fitting ø 3 MM Stainless Steel M06S - Compression fitting ø 6MM Stainless Steel M08S - Compression fitting ø 8 MM Stainless Steel M10S - Compression fitting ø 10 MM Stainless Steel M12S - Compression fitting ø 12 MM Stainless Steel IX2S - Compression fitting ø 1/8" Stainless Steel IX4S - Compression fitting ø 1/4" Stainless Steel - Compression fitting ø 3/8" Stainless Steel IX8S - Compression fitting ø 1/2" Stainless Steel H04S - Hose nozzle 4,8 mm Stainless Steel H06S - Hose nozzle 6,4 mm Stainless Steel H08S - Hose nozzle 8,0 mm Stainless Steel

Hose nozzles max. 15 bar

## **GCE** CENTRAL GAS SYSTEMS

# FLOW CURVES:



## **ORDER CODE:**

Example Line Regulator | PUR Line | Stainless Steel | 5 m³ Series | Precision | Single Stage | 4-Port Version

LSBPVSF	R	D1	A2	ВТ	ВТ	N14F	N14F	RV	N14F
LSBPESF		(1/4" NPT female) (1/4" NPT female)							
	Porting	Inlet pressure	Outlet pressure	Inlet gauge	Outlet gauge	Inlet connection	Oulet connection	Safety device	Relief valve connection
	R Inlet right	D1 12 bar	A4 250 mbar	00 Without 1/4" NPT female	00 Without 1/4" NPT female			00 Without 1/4" NPT female 01 Without (plugged)	0001 – if no safety device is choosen
	L Inlet left	E1 40 bar	A3 450 mbar	01 Without (plugged)	01 Without (plugged)	possible	possible		
			A2 1,3 bar	BT Bourdon Tube gauge	BT Bourdon Tube gauge	connections connections see technical drawing drawing	RV Relief valve **	possible connection if safety	
			BX 3,0 bar *						device RV is choosen
	* only for inlet pressure 40 bar ** only for outlet pressure 1,3 bar and 3 bar								see technical drawing

Order code (as described above) without special characters or spaces! Complete Order Code LSBPVSFRD1A2BTBTN14FN14FRVN14F